

A Quasi-Experimental Study to Assess the Effectiveness of Structured Teaching Program on Knowledge Regarding Water Borne Diseases among Upper Primary School Going Children Studying at Class 6th to 8th in Selected School, Chaubepur, Kanpur

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ABSTRACT

According to WHO every year more than 3.4 million people die as a result of water borne diseases, making it the leading cause of morbidity and mortality around the world. Most of the victim are young children, the vast majority of whom die of illness caused by organisms that thrive in water sources contaminated by raw sewage. Developing country carry a heavy burden of water borne disease, the heaviest being diarrheal diseases when compared to developed countries. In India, 128 million people lack safe drinking water. According to world bank estimates, 21% of the communicable diseases in India are related to unsafe water. Further according to ministry of drinking water and sanitation, nearly 24% of the habitations in India do not have full access to drinking water supply., Title of the study was “A quasi experimental study to assess the effectiveness of structured teaching program on knowledge regarding water borne diseases among upper primary school going children studying at class 6th to 8th in selected school, , Chaubepur, Kanpur. Objectives to assess the pretest knowledge regarding prevention of selected water borne diseases among upper primary school going children. to determine the effectiveness of structured teaching programme on knowledge regarding prevention of water borne diseases among upper primary school going children. to find out the association between pretest knowledge scores regarding prevention of selected water borne diseases with their selected demographic variables. Methodology adopted for the study was quantitative research approach with a quasi-experimental design was adopted. In this study, the sample consists of 30 upper primary school children who fulfilled the inclusion criteria for the study. The systemic random sampling technique was used for this study. A structured Socio demographic variables and Knowledge questionnaire on prevention of water borne disease were selected based on the objectives of the study. The tools are prepared in two sections. Section A was socio- demographic data, and the Section –B was Knowledge questionnaire on prevention on water borne disease. Validity of the tool was established with experts. For the main study the data collected from upper primary school children who fulfilled the inclusion criteria. The collected data was tabulated according to various parameters and the complete analysis was done with descriptive and inferential statistics. The study concluded STP was effective to bring good knowledge regarding prevention of water borne diseases among upper primary school children.

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KEYWORDS: Raw Sewage, Diarrheal Disease, Safe Drinking Water, Sanitation

Need for the study: -

Water borne diseases include diarrhoea, typhoid fever, amoebiasis and a wide range of other parasitic infection. These diseases kill more than a million people every year, many of them are children in developing countries. People can contract these diseases when they drink water that contains dangerous microorganisms, including viruses, bacteria, single celled organisms called protozoa and larger parasites such as worms. Water borne disease can also occur if people eat food that has been prepared using contaminated water or when parasites enter the body directly through an open wound. The most common causes of water borne disease are unclean water supplies, inadequate sanitation and poor hygiene. Many water borne diseases can be fatal, especially to the very old or very young. Non-fatal infections can cause extreme discomfort and a wide range of symptoms that include nausea, vomiting and diarrhoea.

Water borne disease can become major problems after natural disasters if large number are forced to live temporarily in crowded areas with poor sanitation and limited supplies of safe water. Research suggests that. In some settings, climate change could affect water borne diseases, because changes in temperature and rainfall can affect the survival of diseases causing organisms.

Objectives

1. To assess the pretest knowledge regarding prevention of selected water borne diseases among upper primary school going children Kanpur.
2. To determine the effectiveness of structured teaching programme on knowledge regarding prevention of water borne diseases among upper primary school going children Kanpur.
3. To find out the association between pretest knowledge scores regarding prevention of selected water borne diseases with their selected demographic variables.

Material and method: -

Research approach and design: - Quantitative approach with quasi experimental design was adopted.

Setting of the study: - Lav-Kush public higher secondary school Chaubepur, Kanpur

Study population: - Upper primary school going children

Accessible population: - Upper primary school going children

Sample size: - 30

Sampling technique: - Systemic random sampling technique.

Inclusive criteria:

1. Who were willing to participate
2. Who are studying in class 6 to 8.
3. Who are studying in the selected schools Chaubepur, Kanpur.
4. Who will be present at the time of data collection.
5. Both male and female.

Exclusion criteria

1. Who was not willing to participate.

Variables under study

Independent variable: The structured teaching programme is the independent variable.

Dependent variable: The knowledge regarding selected water borne diseases.

Demographic variables: - The demographic variables are age in years, sex, religion, class, history of water borne diseases. Previous knowledge regarding selected water borne diseases.

Description of Tools

A Socio-demographic variables and Knowledge questionnaire on prevention of water borne disease.

Section – A: Socio-demographic data consist of 6 items such as age in years, sex, religion, class, history of water borne diseases. Previous knowledge regarding selected water borne diseases.

Section – B: The Knowledge questionnaire on prevention of water borne disease.

Scoring for Knowledge questionnaire are mentioned as.

Total score 15

1-4 = very poor

5-8 = poor

9-12 = average

13-15 = good.

Data collection procedure: -

Final data collection was conducted at Lav-Kush public Higher secondary school Chaubepur, Kanpur, u.p and permission was taken for the final study from the head master of the selected school.

An information consent was taken from all the subjects after explaining the objectives of the study and the method of filling questionnaire, confidentiality it was assured to all the subjects to get the cooperations.

Implementation of structured teaching program regarding prevention of selected water borne diseases.

2. 30 upper primary school going children is taken as a sample

Limitations of the study

1. the group is upper primary school going children

3. Limited to a selected school.

Analysis and interpretations

Section I:- Base line characteristics of participants.

Table 1: - Baseline characteristics of the participants

Sl.no	Demographic variables	frequency	percentage
1.	Age in years		
	9-12 years	04	13.3
	13-15 years	23	76.7
	Above 15	03	10
2.	Gender		
	Male	15	50
	Female	15	50
3.	Religion		
	Hindu	30	100
	Muslim	00	0
	Christian	00	0
	Others	00	0
4.	Class of study		
	VI	11	36.7
	VII	09	30
	VIII	10	33.3
5.	Any history of water borne disease		
	Yes	10	33.3
	No	20	66.7
6.	Previous knowledge		
	Yes	24	80
	No	06	20

Section II: - Effectiveness of STP on prevention of water borne diseases

Table no 2: - Effectiveness of STP on prevention of water borne diseases.

Knowledge level	Very poor	poor	Average	Good
Pre test	03	08	18	01
Post test	00	00	00	30

Paired t test used to assess the effectiveness of STP on knowledge regarding prevention of water borne disease and the obtained value was 9.03 and the table value was 1.68 at 0.05 level of confidence. Since the obtained value greater than the table value STP was effective So, the H1 hypothesis was accepted. The investigator concluded the structured teaching programme was effective.

Assess the association between pretest knowledge score with selected demographic variables.

Table no: - 3 chi square showing association between pretest knowledge with selected demographic variables.

Sl. no	Demographic variables	Level of knowledge				Calculated value	Table value	Degree of freedom	Interpretation
		Very poor	Poor	average	Good				
1.	Age in years					1.84	9.45	4	NS
	9-12 years	0	1	2	0				
	13-15 years	2	7	13	1				
	Above 15	1	0	3	0				
2.	Gender					0.35	5.99	2	NS
	Male	3	4	7	1				
	Female	2	4	9	0				

3.	Religion								
	Hindu	3	8	18	1	NIL	NIL	NIL	NS
	Muslim	0	0	0	0				
	Christian	0	0	0	0				
	Others	0	0	0	0				
4.	Class of study					0.49	9.45	4	NS
	VI	1	2	7	1				
	VII	1	5	4	0				
	VIII	1	1	8	0				
5.	Any history of water borne disease					0.17	5.99	2	NS
	Yes	1	1	7	1				
	No	2	7	11	0				
6.	Previous knowledge					0.45	5.99	2	NS
	Yes	1	7	14	2				
	No	1	1	4	0				

The chi-square calculation explains that there was NO significant association between Pretest knowledge level and the sociodemographic variables. as the chi-square value was less than the table value at 0.05 level of significance.

Conclusion: -

After administering structured teaching program on prevention on selected water borne diseases. The post level of knowledge among upper primary school going children revealed that all 30 students belong to good knowledge category.

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